

REMARKS

Claims 1-20 are pending. By this Amendment, claims 1, 2, 4 and 8 are amended and claims 10-20 are added. Reconsideration and allowance in view of the above amendments and following remarks are respectfully requested.

37 C.F.R. § 1.111(b) states: In order to be entitled to reconsideration or further examination, the applicant or patent owner must reply to the Office action. The reply by the applicant or patent owner must be reduced to a writing which distinctly and specifically points out the supposed errors in the examiner's action and must reply to every ground of objection and rejection in the prior Office action. The reply must present arguments pointing out the specific distinctions believed to render the claims, including any newly presented claims, patentable over any applied references. If the reply is with respect to an application, a request may be made that objections or requirements as to form not necessary to further consideration of the claims be held in abeyance until allowable subject matter is indicated. The applicant's or patent owner's reply must appear throughout to be a *bona fide* attempt to advance the application or the reexamination proceeding to final action. A general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references does not comply with the requirements of this section.

It is respectfully submitted that the reply filed November 13, 2006 fully complied with 37 C.F.R. § 1.111. For example, page 8, line 18 through page 9, line 4, clearly pointed out the specific distinctions believed to render new claims 10 and 18 patentable over the applied references.

There is no requirement in 37 C.F.R. § 1.111(b), in particular, or any provision of 35 U.S.C. or 37 C.F.R. in general, that requires Applicants to provide support for where the new claimed subject matter is found in the originally filed specification, as stated in the February 9, 2007 Office Action.

In order to advance prosecution of the application, however, Applicants provide the following discussion of claims 10-20. The following discussion is not an admission that the claims are limited to any of the embodiments disclosed in the instant application.

Claim 10 is supported, for example, at page 7, line 24 through page 8, lines 4 and 19-24; page 11, lines 5-9; and page 22, lines 11-12.

Support for claim 11 may be found, for example, at page 11, lines 23-24.

Support for claim 12 may be found, for example, at page 17, lines 19-21.

Claim 13 is supported, for example, at page 18, lines 3-4.

Claim 14 is supported, for example, at page 13, line 23 through page 14, line 6.

Support for claims 15 and 16 may be found, for example, at page 9, lines 14-25.

Claim 17 is supported, for example, at page 10, lines 1-7.

Support for claim 18 may be found, for example, at page 7, line 24 through page 8, lines 4 and 19-24; page 11, lines 5-9; page 16, line 14; page 17, lines 22-25; and page 22, lines 11-12.

Claim 19 is supported, for example, at page 16, line 14 and page 17, lines 22-25.

Claim 20 is supported, for example, at page 17, lines 22-25.

Claims 1-9 were objected to. Claims 1, 2, 4 and 8 have been amended to obviate the objection. As no statutory basis was provided for the objection, it is respectfully submitted that the amendments to claims 1, 2, 4 and 8 are not related to any requirement for patentability.

With respect to claim 9, Applicants are not claiming a Markush group.

Reconsideration and withdrawal of the objection to claims 1-9 are respectfully requested.

Claims 1-9 were rejected under 35 U.S.C. § 103(a) over Yonezu et al. (Japanese Published Application 2001-093551) in view of Yamada et al. (U.S. Patent 5,432,123). The rejection is respectfully traversed.

Claim 1 is directed to a direct methanol fuel cell including a multiple number of connected unit cells. Each of the unit cells is composed of a fuel electrode element of a microporous carbon material, an electrolyte layer that is formed on an outer surface of the fuel electrode element, and an air electrode layer that is formed on an outer surface of the electrolyte layer. Each unit cell is connected to a fuel feeder having an infiltration structure and coupled with a fuel reservoir for storing liquid fuel, so as to supply liquid fuel thereto.

Yonezu et al. disclose a methanol fuel cell having a container 1 that holds methanol. A tube 3 connects the container 1 to the body 2 that includes a cell, and operates by capillary action. The cell includes an evaporating plate a, an anode b, an electrolyte membrane c, a cathode d, a gas channel e, and a separator f that are arranged between two liquid osmosis plates g. Osmosis material 8 is included in the container 1 and delivers the liquid fuel to the tube 3 for capillary delivery through the tube 3 to the cell body 2.

The Official Action acknowledges that Yonezu et al. do not disclose or suggest the unit cell as claimed, or the microporous carbon material. That is, Yonezu et al. do not disclose or suggest a unit cell that is composed of a fuel electrode element of a microporous carbon material, an electrolyte layer formed on the outer surface of the fuel electrode element, and an air electrode layer formed on the outer surface of the electrolyte layer.

It is respectfully submitted that Yamada et al. fail to cure the deficiencies of Yonezu et al.

The Office Action identifies column 15, lines 12-23 of Yamada et al. as providing a disclosure of the microporous carbon material recited in claim 1. However, Yamada et al. merely disclose conductive porous material and do not disclose or suggest microporous carbon material. In fact, upon review of Yamada et al. in its entirety, Applicants find that there is no disclosure of microporous carbon material. Therefore, even assuming it would have been obvious to combine Yonezu et al. and Yamada et al., such a combination would not include all of the features of claim 1 and would not present a *prima facie* case of obviousness. See MPEP § 2143. Should the rejection be maintained, it is respectfully requested that it be explained how the conductive porous material of Yamada et al. is being interpreted as disclosing or suggesting microporous carbon material.

Claims 2-8 recite additional features of the invention and are allowable for the same reasons discussed above with respect to claim 1 and for the additional features recited therein.

Reconsideration and withdrawal of the rejection of claims 1-9 under 35 U.S.C. §103(a) over Yonezu et al. in view of Yamada et al. are respectfully requested.

Claims 10 and 18 each recite a fuel reservoir having an occluding element that is for absorbing a liquid fuel filling an area within the fuel reservoir so that any fuel in the reservoir will be in contact with the occluding element in any orientation of the reservoir, the occluding element being formed of a porous material and/or bundled fibers representing capillarity. This feature, at least, is not disclosed or suggested by Yonezu et al. or Yamada et al., alone or in combination. For example, Figure 1 of Yonezu et al. shows a liquid fuel vessel 1 that is partially filled with liquid osmosis material 8 and Figure 23 of Yamada et al. shows a wick made of fibers 34 that is directly adjacent to, and in fluid communication with, the fuel storing space 40. Those two configurations have many orientations where fuel may not be in contact with an occluding element.

Claims 11-17, 19 and 20 are allowable at least by virtue of their dependence from claims 10 and 18.

For at least the reasons stated above, it is believed that this application is in condition for allowance and that all the objections and rejections should be withdrawn.


Should any questions arise in connection with this application, or should the Examiner feel that a teleconference with the undersigned would be helpful in resolving any issues, the undersigned requests that he be contacted at the number indicated below.

Respectfully submitted,

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